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Atty. Dkt. No. ATT/2001-0067

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A radio receiver comprising:
first and second antennas connected to RF processing circuitry by an RF switch;
and
an RF switch control in communication with said RF switch, where said RF switch control is for switching said radio receiver from a first mode of operation to a second mode of operation in response to a request for QoS improvement, where said RF switch control for switching between said first and second antennas being switched in response to a predefined schedule of a sequence of scheduled packet bursts in accordance with said second mode of operation, wherein said first mode of operation comprises a conventional mode and said second mode of operation comprises a multiple burst mode.
2. (Currently amended) The radio receiver of claim 1, wherein:
the RF switch control schedules said sequence bursts prescribed by [[a]] said QoS defined by a MAC protocol.
3. (Previously presented) The radio receiver of claim 2, wherein:
said RF switch control is a MAC processor that is synchronized with transmission of a base station.
4. (Original) The radio receiver of claim 1, wherein:
the antennas are switched so that each antenna receives a related packet burst.
5. (Currently Amended) A method of maintaining a controlled QoS in a wireless communication system, comprising steps of:
receiving scheduled communications from a transceiver at a transmission station in accordance with a predefined schedule by wireless transceivers at receiving stations

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PATENT

Atty. Dkt. No. ATT/2001-0067

having switched protocol diversity reception operational modes comprising a conventional mode and a multiple burst mode, where said scheduled communications being formatted as multiple packet bursts in accordance with said multiple burst mode and in response to a request for QoS improvement;

enabling a first antenna to receive a first packet burst in accordance with said predefined schedule;

enabling a second antenna to receive a second packet burst in accordance with said predefined schedule;

recording the received bursts as soft information in a storage medium; and
combining the soft information from the first and second bursts into a single message.

6. (Original) The method of claim 5 wherein:

each packet burst contains a same complete message.

7. (Original) The method of claim 5 wherein:

each packet burst contains a portion of a space-time coded message spread across the first and second packet bursts.

8. (Currently Amended) A method of achieving a QoS control in a wireless LAN communication system, comprising steps of:

transmitting a message contained within a plurality of packet bursts occurring at spaced time intervals;

receiving each of the packet bursts individually at one of a plurality of antennas in accordance with a predefined schedule, where said predefined schedule is used to select one of said plurality of antennas for receiving each of said packet bursts, where said antenna selection is performed in accordance with switching from a conventional mode of operation to a multiple burst mode of operation in response to a request for QoS improvement.

9. (Previously presented) The method of claim 8 wherein;

PATENT

Atty. Dkt. No. ATT/2001-0067

each of the plurality of the antennas is connected to a radio receiver at separate times relative to other antennas.

10. (Original) The method of claim 8, wherein:

including a complete message within each packet burst.

11. (Original) The method of claim 8 wherein:

a message is spread across the plurality of packet bursts by space-time coding.

12. (Previously presented) The method of claim 8 wherein:

the transmitting combines a protocol with signal processing.

13. (Currently Amended) A communication system for coupling a transmitter and a receiver adapted for receiving at least first and second signal bursts by first and second antennas respectively, and responding to the two signal bursts to communicate a single unified message at the receiver; whereby:

the first and second signal bursts are sequentially separated in time in accordance with a predefined schedule;

the first and second antennas are sequentially enabled in accordance with said predefined schedule to communicate with at least one storage medium at the receiver, where said antenna enablement is performed in accordance with switching from a conventional mode of operation to a multiple burst mode of operation in response to a request for QoS improvement; and

enabling a representation of the unified message by responding to the first and second signal bursts.

14. (Original) The communication system of claim 13, wherein:

the first and second signal bursts are identical packets of a common message.

15. (Original) The communication system of claim 13, wherein:

PATENT

Atty. Dkt. No. ATT/2001-0067

the first and second signal bursts are each part of a space-time coded message spread across two bursts; and

a common message is derived from the sequential signal bursts received by the first and second antennas.

16. (Previously presented) The communication system of claim 13, wherein:

said enabling includes retaining the first and second signal bursts in said at least one storage medium and processing to deliver the single unified message.

17. (Previously presented) The communication system of claim 15, wherein:

said deriving the common message includes selecting a message from one of the antennas.

18. (Previously presented) The communication system of claim 15, wherein:

said deriving the common message includes decoding a space-time coded signal spread across and received by both the first and second antennas.

19. (Previously presented) The method of claim 8, including a further step of:

notifying a transmitter at a transmitting end by a receiving end of a number of antennas and radio receivers at the receiving end.

20. (Previously presented) The method of claim 8, including a further step of:

a receiver notifying a transmitter that said receiver accepts and responds to protocol-assisted diversity operations.

21. (Previously presented) The method of claim 8, including a further step of:

upon reconstruction of a received message sending a message to a transmitting end to cease further message bursts.

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